

KEY CONCEPT OVERVIEW

During the next week, our math class will continue to explore measurement as students learn to solve addition and subtraction word problems involving length. We will learn about using the ruler as a **number line** and drawing **tape diagrams** to compare lengths.

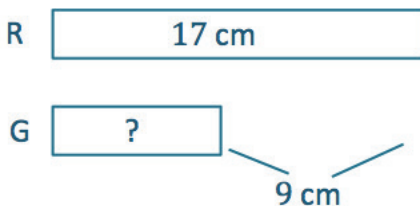
You can expect to see homework that asks your child to do the following:

- Use a ruler as a number line to solve addition and subtraction word problems.
- Use measurement tools, such as a meter tape and string, to measure and compare lengths.
- Draw tape diagrams to solve word problems involving length.

SAMPLE PROBLEM (From Lesson 10)

The red pencil is 17 centimeters long. The green pencil is 9 centimeters shorter than the red pencil. What is the total length of both pencils?

Step One:



Step Two:

$$17 - 9 = 8$$



$$17 + 8 = 25$$

The total length of both pencils is 25 centimeters.

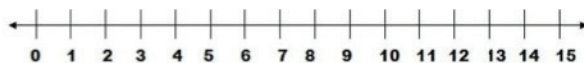
Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at GreatMinds.org.

HOW YOU CAN HELP AT HOME

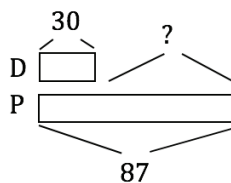
- Play “Tape Measure Addition”: Partner A calls out a number on the tape measure (e.g., 32). Partner B uses a finger to locate the number on the tape measure. Then she adds ten by sliding a finger along the strip. Partner B calls out the answer in the form of a number sentence; for example, “Thirty-two plus ten equals forty-two!”
- Practice counting in centimeters with your child. Start at 0 and count by 10 centimeters up to 1 meter, then back down; i.e., “10 centimeters, 20 centimeters, 30 centimeters, 40 centimeters...80 centimeters, 90 centimeters, 1 meter, 90 centimeters, 80 centimeters, 70 centimeters,” and so on. Invite your child to teach you the way we count centimeters in class, which is called “Happy Counting” and includes a hand motion.
- As your child draws a tape diagram to solve a word problem, ask questions such as, “How did you label each part of your drawing?” “Which tape is longer?” and “How did you show the difference in lengths (shorter/longer) in your drawing?”

MODELS

Number Line: A line with numbers placed at evenly spaced hash marks. It is useful for addition and subtraction and for seeing the relationships between numbers.



Tape Diagram: A problem-solving model that helps students see the relationships between quantities. For example, Vincent counts 30 dimes and 87 pennies in a bowl. How many more pennies than dimes are in the bowl?



$$87 - 30 = 57$$

There are 57 more pennies than dimes.